# **EXHIBIT 4**

# UNREDACTED PUBLIC VERSION

HIGHLY CONFIDENTIAL – OUTSIDE ATTORNEYS' EYES ONLY – SOURCE CODE

# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

IOENGINE, LLC,		)	
	Plaintiff,	) ) )	C.A. No. 18-452 WCB
	v.	)	JURY TRIAL DEMANDED
PAYPAL HOLDINGS, INC.,		)	
	Defendant.	)	

## PLAINTIFF IOENGINE, LLC'S FINAL CLAIM CHARTS

Pursuant to Paragraph 4(c) and note 3 of the District of Delaware's Default Standard for Discovery, Including Discovery of Electronically Stored Information (the "Default Standard for Discovery") and the Court's July 26, 2021 Fourth Revised Scheduling Order (D.I. 250), Plaintiff IOENGINE, LLC ("IOENGINE" or "Plaintiff") hereby provides its Final Claim Charts relating to each accused PayPal Holdings, Inc. ("PayPal" or "Defendant") product or service (the "Accused Products") and the asserted claims of U.S. Patent Nos. 9,059,969 (the "'969 Patent") and 9,774,703 (the "'703 Patent") (collectively the "Patents-in-Suit").

## PRELIMINARY STATEMENT

IOENGINE has made a reasonable and good faith effort to identify infringing aspects of PayPal's Accused Products. Discovery in this matter, however, has not been completed, and IOENGINE's Final Claim Charts are based upon present knowledge and belief. Furthermore, should discovery uncover information relevant to the Accused Products, such that different versions or features of the Accused Products necessitate different or additional analysis, including infringement analysis under the Doctrine of Equivalents and direct and indirect infringement

#### FINAL EXHIBIT F

### U.S. Patent No. 9,059,969 vs. PayPal Mobile Card Reader

The following final claim charts reflect IOENGINE's current infringement analysis based on the limited information that has been produced by PayPal Holdings, Inc. ("PayPal") and the limited public information that is available upon a reasonable search. These final claim charts, and the citations included therein, are intended to provide evidence sufficient to relate the PayPal Mobile Card Reader product and service to selected claims of U.S. Patent No. 9,059,969 (the "'969 Patent"). Discovery remains ongoing, and PayPal has not completed its production of documents, including its ongoing production of Electronically Stored Information, as of the date of service of these Final Infringement Contentions.

IOENGINE notes that, to the extent that the PayPal Mobile Card Reader products are provided or used on or through multiple platforms and/or in different environments, the attached final charts are intended to be representative of the corresponding functionality across all such multiple platforms/environments. Any examples provided below are only intended as examples, and do not limit or comprise the entirety of IOENGINE's allegations of infringement. Furthermore, while these final charts directly address the PayPal Mobile Card Reader product, IOENGINE believes that additional PayPal products share the same or substantially similar functionality, and that any differences are immaterial to an analysis of whether or not those products infringe the '969 Patent. Therefore, these final charts also apply to any such products that similarly infringe the '969 Patent. For example, the PayPal Here SDK Master Distribution for Android is designed to be used with a variety of Accused PayPal mPOS Products: the "ReaderModel.java" class, which is defined in the PayPal Here SDK Master Distribution for Android and contains "enum values" corresponding to different Accused PayPal mPOS Products: "M003," "M010," "Moby3000," "RP450," and "Swiper." See https://github.com/paypal/paypal-here-sdk-android-distribution/blob/master/docs/reference/com/paypal/paypalretailsdk (the "Android Master Distribution Documentation") at ReaderModel.html. Similarly, in the iOS Master Distribution SDK, the "PPRetailReaderModel" structure contains enumerated types corresponding to "PPReaderModelM003", "PPReaderModelM010", "PPReaderModelMoby3000", "PPReaderModelRP450", "PPReaderModelSwiper", and "PPReaderModelUnknown." See, e.g., https://github.com/paypal/paypal-here-sdk-iOS-distribution/tree/master/docs (the "iOS Master Distribution Documentation") at /Constants/PPRetailReaderModel.html. "M010" corresponds to the accused PayPal Chip Card Reader, model No. M010-PROD10v2-7; "Moby3000" corresponds to the accused PayPal Chip and Swipe Reader, model Nos. Moby/3000 and M0B30AA; "Swiper" corresponds to the accused PayPal Mobile Card Reader, Model Nos. G3X, G4XD, G5X; and, "RP450" corresponds to the accused PayPal Chip and Tap Reader, Model Nos. RP457c-BT and RP457c-0BT8901B. See, e.g., PayPal's Responses and Objections to IOENGINE's First Set of Interrogatories, served on September 4, 2018, Response to Interrogatory No. 1. Similarly the PayPal Here SDK 1.6.10 for Android is designed to be used with a variety of Accused PayPal mPOS Products: "ChipAndPinReader" and "MagneticCardReader." See https://github.com/paypal/paypal-here-sdk-android-distribution/tree/release-1.6.10/docs/javadoc/com/paypal/merchant/sdk/ (the "Android SDK 1.6.10 Documentation") at CardReaderListener.ReaderTypes.html. Similar functionality exists in the iOS Version 1.6 SDK. See, e.g.,

https://github.com/paypal/paypal-here-sdk-ios-distribution/blob/PayPalHereSdkv1.6/SDK/html (the "iOS SDK 1.6 Documentation") at /Constants/PPHReaderType.html and /Constants/PPHReaderModel.html. See also PPSDK0001609 and PPSDK0001608. The "ReaderTypes" value of "ChipAndPinReader" indicates that the connected reader is the accused PayPal Here Chip and Pin Reader, and the value of "MagneticCardReader" indicates that the connected reader is the accused PayPal Here Mobile Card Reader. Where citations are provided herein to one version or distribution of a PayPal SDK, similar functionality exists in other version to distributions of PayPal SDKs. See, e.g., PP0000020 (comparing "SDK features and method signatures on Windows JS SDK & Android"). Moreover, the PayPal Mobile Card Reader, PayPal Chip and Swipe Reader, and PayPal Chip and Tap Reader are based on Ingenico mobile reader devices, see, e.g., Ingenico Inc. v. IOENGINE, LLC, Civ. No. 18-826-WCB (D. Del.), at D.I. 1 (Ingenico Inc.'s June 1, 2018 Complaint for Declaratory Judgment of Noninfringement), at ¶¶ 7-8 (describing the "PayPal Mobile Card Reader, PayPal Chip and Swipe Reader, and PayPal Chip and Tap Reader" as "Card Reader Products supplied to PayPal by Ingenico"), and all "us[e] the same EMV L2 Kernal version." PP0004373 (referring to the "MOBY/3000, RP350x, RP457c and RP755x and RP757c family of readers"). See also PP0004376 (The "RP350x, RP450c and RP750x family of readers" all "use the same EMV Kernal version," "fully supporting the transaction feature set of each device based on device capability."). Additionally, the "common interface that applications can use to communicate with" the PayPal Chip and Swipe Reader (the Moby3000), PayPal Mobile Card Reader (the G4X/G5X) and the PayPal Chip and Tap Reader (the RP457c products), is the ROAMreader Unified API. PP0005698, at PP0005702. See also, id. at PP0005703. As such, these final claim charts are not intended to be exhaustive of all citations and/or evidence that IOENGINE may rely upon to show infringement.

PayPal Here is offered by PayPal for mobile payment processing, and is a combination of software, in the form of the PayPal Here SDK and PayPal Here App, and hardware, in the form of card readers, including the PayPal Mobile Card Reader. *See generally* Deposition of Cory Wright (Rough) at 11:12-15:25, 34:24-36:6, 123:23-125:24. The PayPal Here SDK and PayPal Here App communicate with the card reader to facilitate communication with a PayPal server to, among other things, process payments. *Id.*; *see also, e.g., id.* at 49:11-50:4, 51:9-19, 126:25-127:25.

At least the importing, making, using, offering for sale, and selling of the PayPal Mobile Card Reader products and services, and use by PayPal of the functionality identified in these final claim charts, constitutes direct infringement by PayPal. PayPal also infringes under the Doctrine of Equivalents, as any differences between the claimed inventions and the PayPal Mobile Card Reader products and services are not substantial and the PayPal Mobile Card Reader products and services perform substantially the same identified functionalities, in substantially the same way, to obtain or achieve the same result as the claimed limitations. With respect to the method claims, at least the use by PayPal of the identified functionalities in these final claim charts constitutes direct infringement by PayPal. In addition, to the extent PayPal contends that PayPal itself is not performing one or more of the method steps—including when claimed program code is running on an end-user's terminal or when claimed program code utilizes the end-user's terminal to perform claimed functionality—the performance of method steps and use of claimed systems by end users is

attributable to PayPal such that PayPal is liable as a direct infringer. PayPal is also liable for contributory infringement and/or inducement of infringement due to, for example, providing/selling the devices, program code, services, and instructions that cause, induce, and/or contribute to direct infringement by PayPal's Point of Sale "Partners," and by users of these Partners' and PayPal's mobile payment apps. PayPal also jointly infringes the Patents-in-Suit by, for example, directing and controlling the infringing use of the Accused Products by PayPal's Point of Sale "Partners" and users of these Partners' and PayPal's mobile payment apps. For example, PayPal describes the PayPal Here SDK Master Distribution for Android as an SDK that "enables Android apps to process inperson credit card transactions using an assortment of card readers [https://www.paypal.com/webapps/mpp/credit-card-reader#A39] that are capable of accepting contactless, EMV, and swipe payment methods." See https://github.com/paypal/paypal-here-sdkandroid-distribution/blob/master/README.md. See also PPSDK0000015. Further PayPal instructs that "[d]evelopers should use the PayPal Here SDK to get world-class payment processing with one simple integration. Some of the main benefits include . . . Live customer support: Whenever you need support, we're available to help with our customer support team. Visit our website [https://www.paypal.com/webapps/mpp/credit-card-reader] for more information about PayPal Here." Id. See also https://github.com/paypal/paypal-here-sdk-android-distribution/blob/release-1.6.10/README.md. See also PPSDK0000224. Similar functionality exists in the iOS Master Distribution SDK. See, e.g., https://github.com/paypal/paypal-here-sdk-iOSdistribution/blob/master/README.md. See also PPSDK0000932. See, e.g., https://github.com/paypal/paypal-here-sdk-iosdistribution/blob/PayPalHereSdkv1.6/README.md. PPSDK0001229. Further, there are no non-infringing uses of the PayPal Mobile Card Reader, and the operation of the product is a material part of the performance of the claimed methods and systems.